

Title (en)  
Fitting & pipe joint using it

Title (de)  
Rohrverbindungsstufe und damit hergestellte Rohrverbindung

Title (fr)  
Raccord et connexion de tubes réalisée avec ce raccord

Publication  
**EP 0722824 A3 19990324 (EN)**

Application  
**EP 96300362 A 19960118**

Priority  
GB 9501271 A 19950123

Abstract (en)  
[origin: EP0722824A2] The invention provides a joint 80 for two steel pipes 50, 52 each containing a liner 54, 56 of polyethylene. The invention also provides an electrofusion fitting for joining the liners 54, 56; a method of making the fitting and a method of making the joint 80. The joint 80 consists of an electrofusion fitting having two frusto-conical outer end surfaces which match similar surfaces on the insides of the end portions of the liners 54, 56. Fusion welded joints are formed at the interfaces between the frusto-conical surfaces. A body of insulating material 66 is received in a central recess in the fitting and protects the fitting from the high temperature of the seam 70 between the steel pipes 50, 52. The frusto-conical surfaces make an angle of 10 DEG or less with the longitudinal axis of the fitting. A support body 14 of metal or of synthetic plastics material contained by the electrofusion fitting ensures that the fitting is adequately supported during electrofusion. <IMAGE>

IPC 1-7  
**B29C 65/34**; **F16L 47/02**

IPC 8 full level  
**F16L 47/02** (2006.01); **B29C 65/00** (2006.01); **B29C 65/34** (2006.01); **B29D 23/00** (2006.01); **F16L 13/02** (2006.01); **B29L 23/00** (2006.01)

CPC (source: EP US)  
**B29C 65/342** (2013.01 - EP US); **B29C 65/3464** (2013.01 - EP US); **B29C 65/3468** (2013.01 - EP US); **B29C 65/348** (2013.01 - EP US); **B29C 66/1282** (2013.01 - EP US); **B29C 66/1284** (2013.01 - EP US); **B29C 66/1286** (2013.01 - EP US); **B29C 66/14** (2013.01 - EP US); **B29C 66/5221** (2013.01 - EP US); **B29C 66/5229** (2013.01 - EP US); **B29C 66/52295** (2013.01 - EP US); **B29C 66/612** (2013.01 - EP US); **B29C 66/636** (2013.01 - EP US); **B29D 23/005** (2013.01 - EP US); **F16L 13/0263** (2013.01 - EP US); **F16L 47/03** (2013.01 - EP US); **B29C 66/71** (2013.01 - EP US); **B29K 2059/00** (2013.01 - EP US); **B29K 2305/12** (2013.01 - EP US); **B29L 2009/003** (2013.01 - EP US)

Citation (search report)  
• [YD] EP 0366299 A2 19900502 - WELDING INST [GB]  
• [A] US 3508766 A 19700428 - KESSLER NEWLIN W, et al  
• [A] FR 2522457 A1 19830902 - SLOANE MFG CO R & G [US]  
• [A] WO 9107272 A1 19910530 - BRITISH GAS PLC [GB]  
• [A] EP 0055891 A1 19820714 - BRITISH GAS CORP [GB], et al  
• [A] DE 8910407 U1 19891116  
• [Y] PATENT ABSTRACTS OF JAPAN vol. 018, no. 677 (M - 1727) 20 December 1994 (1994-12-20)  
• [A] PATENT ABSTRACTS OF JAPAN vol. 018, no. 183 (M - 1584) 29 March 1994 (1994-03-29)  
• [A] PATENT ABSTRACTS OF JAPAN vol. 018, no. 108 (M - 1564) 22 February 1994 (1994-02-22)  
• [A] PATENT ABSTRACTS OF JAPAN vol. 017, no. 618 (M - 1510) 15 November 1993 (1993-11-15)

Cited by  
WO2012017171A1; DE10257224A1; DE10257224B4; GB2391597A; AU722908B2; FR2963654A1; FR2876773A1; GB2384535A; GB2384535B; US11441719B2; US8398119B2; US7908732B2; US7722085B2; US10562235B2; WO2010041016A1; WO2006042925A1; WO9821513A1; WO2018083397A1; US11338526B2; US11454346B2; WO2017064520A1; US8942552B2

Designated contracting state (EPC)  
BE DE ES FR GB IT NL SE

DOCDB simple family (publication)  
**EP 0722824 A2 19960724**; **EP 0722824 A3 19990324**; **EP 0722824 B1 20021127**; AR 000446 A1 19970625; BR 9600194 A 19971007; CA 2167778 A1 19960724; CA 2167778 C 19990810; DE 69624956 D1 20030109; DE 69624956 T2 20030703; ES 2188718 T3 20030701; GB 2297135 A 19960724; GB 2297135 B 19990428; GB 9501271 D0 19950315; GB 9600953 D0 19960320; JP 2687994 B2 19971208; JP H08240295 A 19960917; US 5685572 A 19971111

DOCDB simple family (application)  
**EP 96300362 A 19960118**; AR 10111696 A 19960123; BR 9600194 A 19960123; CA 2167778 A 19960122; DE 69624956 T 19960118; ES 96300362 T 19960118; GB 9501271 A 19950123; GB 9600953 A 19960116; JP 948596 A 19960123; US 58835896 A 19960118